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Matters relating to capacity-building for developing countries
Capacity-building under the Convention
Capacity-building under the Kyoto Protocol

Implementation of the framework for capacity-building in developing countries

Synthesis report by the secretariat

Summary

This synthesis report has been prepared to support the Subsidiary Body for Implementation in its annual monitoring and evaluation, in accordance with decisions 2/CP.7 and 29/CMP.1, of the implementation of the framework for capacity-building in developing countries established under decision 2/CP.7. It draws on information from national communications, biennial update reports, biennial reports, national adaptation programmes of action, national adaptation plans, the 2017 annual report of the Executive Board of the clean development mechanism to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol and the 2017 annual report of the Nairobi Framework Partnership. The information contained in this report, presented consistently with the 15 priority areas for capacity-building in developing countries as outlined in decision 2/CP.7, may assist Parties in reviewing progress in the implementation of the capacity-building framework and identifying areas that require additional capacity-building support. As this report will also serve as input to the work of the Paris Committee on Capacity-building, it contains information relevant to the capacity-building activities in the 2016–2020 workplan. Further, this report contains information on emerging or new areas for capacity-building identified in the national reports, areas that are in line with the outcomes of the third comprehensive review of the capacity-building framework.

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I. Introduction

A. Mandate

1. The Conference of the Parties (COP) requested the secretariat to produce annually a synthesis report on activities undertaken to implement the framework for capacity-building in developing countries established under decision 2/CP.7 (hereinafter referred to as the capacity-building framework).[1]

2. The COP also requested the secretariat to make the report available to the Subsidiary Body for Implementation (SBI) at its sessions coinciding with the annual Durban Forum on capacity-building to facilitate discussions at the forum.[2] In addition, it decided that the report will serve as input to the Paris Committee on Capacity-building (PCCB).[3]

3. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), by decisions 29/CMP.1 and 6/CMP.2, requested the secretariat to consider in the annual synthesis report capacity-building activities relating to the implementation of the Kyoto Protocol in developing countries.

B. Scope of the report

4. This synthesis report summarizes the available information on the extent of the implementation of the capacity-building framework in developing countries, thus enabling annual monitoring of the progress made and the identification of areas that require additional capacity-building support.

5. In line with the provisions in paragraph 2 above, this synthesis report contains information that can serve as input to the PCCB in managing its 2017–2019 rolling workplan,[4] which was developed on the basis of the content of the 2016–2020 workplan.[5] The 2018 focus area or theme of the PCCB is capacity-building activities for the implementation of nationally determined contributions (NDCs) in the context of the Paris Agreement.[6]

6. The information contained in this report refers to activities reported between January 2017 and February 2018 in 18 national communications (NCs), 16 biennial update reports (BURs), three national adaptation plans (NAPs) and one national adaptation programme of action submitted by Parties not included in Annex I to the Convention (non-Annex I Parties) and 19 NCs and 35 biennial reports (BRs) submitted by Parties included in Annex II to the Convention (Annex II Parties) and other Parties. The information herein that is relevant to the Kyoto Protocol comes from the clean development mechanism (CDM) related sections of the above-mentioned national reports, the 2017 annual report of the Executive Board of the CDM to the CMP[7] and the 2017 annual report of the Nairobi Framework Partnership (NFP).[8]

7. This synthesis report includes a summary highlighting the main findings from the synthesized information, which is followed by chapters presenting information on the following topics:

(a) Issues related to reporting on capacity-building activities;

[1] Decisions 2/CP.7, paragraph 9, and 4/CP.12, paragraph 1(e).
[2] Decision 1/CP.18, paragraph 78.
[3] Decision 1/CP.21, paragraph 79.
[4] Contained in document FCCC/SBI/2017/11, annex IV.
[5] Decision 1/CP.21, paragraph 73.
[6] FCCC/SBI/2017/11, paragraph 5(e).
[7] FCCC/KP/CMP/2017/5.
[8] https://nairobiframeworkpartnership.files.wordpress.com/2018/02/nairobi-framework-annual-report-2017.pdf.

(b) Capacity-building action undertaken and further capacity-building gaps and needs indicated by developing country Parties within the scope of the capacity-building framework;

(c) Capacity-building support provided by Annex II Parties and other Parties to address the gaps and needs identified within the scope of the capacity-building framework;

(d) Emerging or new areas for capacity-building and associated gaps and needs indicated by developing country Parties;

(e) Support provided by Annex II Parties and other Parties to address the emerging or new areas for capacity-building;

(f) Capacity-building activities under the Kyoto Protocol.

8. Examples of activities have been drawn from the national reports for illustrative purposes but they comprise neither an exhaustive nor a representative list of Parties' capacity-building efforts.

9. This synthesis report may not convey a complete overview of capacity-building activities undertaken in developing countries, as further work may have been undertaken by developing countries and their support institutions after the submission of the national reports, and information on certain areas may not have been available in those documents.

C. Possible action by the Subsidiary Body for Implementation

10. The SBI may wish to use the information contained in this report:

(a) To monitor and review the implementation of the capacity-building framework;

(b) To support Parties in their consideration of how to enhance the current practice of reporting on the impacts of capacity-building activities, best practices and lessons learned and how these should inform relevant processes under the Convention to enhance the implementation of capacity-building activities;[9]

(c) As input to discussions at the 7th Durban Forum on capacity-building, to be held in conjunction with SBI 48;

(d) As input to the 2nd meeting of the PCCB, to be held in conjunction with SBI 48.

D. Possible action by the Paris Committee on Capacity-building

11. The PCCB may wish to use the information contained in this report, where applicable, for the purposes of:

(a) Identifying capacity gaps and needs and recommending ways to address them, pursuant to decision 1/CP.21, paragraph 73(b);

(b) Promoting the development and dissemination of tools and methodologies for the implementation of capacity-building, pursuant to decision 1/CP.21, paragraph 73(c);

(c) Exploring how developing country Parties can take ownership of building and maintaining capacity over time and space, pursuant to decision 1/CP.21, paragraph 73(f);

(d) Identifying opportunities to strengthen capacity at the national, regional and subnational level, pursuant to decision 1/CP.21, paragraph 73(g);

(e) Taking into consideration, in its work, cross-cutting issues such as gender responsiveness, human rights and indigenous peoples' knowledge, pursuant to decision 16/CP.22, paragraph 4(a);

[9] Decision 16/CP.22, paragraph 3.

(f) Taking into consideration, in its work, the outcomes of the third comprehensive review of the implementation of the framework for capacity-building in developing countries, pursuant to decision 16/CP.22, paragraph 4(b);

(g) Taking into consideration, in its work, ways of enhancing reporting on capacity-building activities, taking into account all initiatives, actions and measures on capacity-building under the Convention and the Paris Agreement as well as existing reporting mandates, in order to achieve coherence and coordination, pursuant to decision 16/CP.22, paragraph 4(f).

II. Summary of findings

12. The **use of the data collected** for national reports beyond their inclusion in the reports needs to be assessed. Some developing countries see the preparation of NCs and BURs as a capacity-building opportunity and actively use the collected data for other purposes, including tracking and monitoring performance, after the submission of the national reports. However, in other countries the information contained in the NCs and BURs is scarcely used after the submission of the reports. This issue should be considered in the light of the increasing reporting responsibilities under the Paris Agreement, which will likely require additional resources and capacity.

13. Progress has been made with respect to **capacity-building at the institutional, systemic and individual level**. More national policies and dedicated government entities for climate change are in place, various awareness-raising and educational activities are being undertaken and climate change is increasingly being integrated in school curricula.

14. Many developing countries still express a need for **additional expertise and technical training at the local, subnational and national level**. Systematic data collection, database management, data analysis and consistent integration of climate change issues into policies constitute major challenges for some countries. Better data collection may also be used to develop more accurate risk models and early warning systems.

15. Owing to the evolving nature of climate science and policy,[10] several capacity-building projects that do not relate directly to one of the 15 priority areas within the capacity-building framework were reported. Some of the **emerging or new areas for capacity-building** identified in the national reports are the measurement, reporting and verification (MRV) of mitigation actions, readiness for and access to climate finance, and NDCs.

16. Some projects have been undertaken to support the **MRV of mitigation actions** in developing countries. Despite the progress made, MRV is still widely cited as an area where capacity needs to be strengthened in terms of both expertise and supporting measurement tools.

17. More regional, national and international **networks for information sharing and cooperation** have been set up, which effectively increases the awareness and capacity of network members; however, further capacity-building is needed to make better use of the websites and platforms and to strengthen cooperation among stakeholder groups. At the same time, access to information remains an issue for some developing countries – especially their rural populations, whose access to the Internet or educational facilities may be limited.

18. Capacity-building is widely recognized by Annex II Parties and other Parties as an **essential element for effective climate action** and has been built into the climate change projects supported by them. The cross-cutting and integrated nature of capacity-building makes it difficult to track capacity-building support separately and attach financial values to such support.

19. **Clearer reporting standards** on capacity-building support provided may be required so that reporting is done in a more consistent manner, enabling a better compilation and aggregation of the data for tracking and monitoring.

[10] See document FCCC/TP/2016/1

20. The **types of capacity-building support** provided by Annex II Parties and other Parties depended primarily on the specific needs and priorities of developing countries and on the strengths and areas of expertise of the developed country Parties. Projects on agricultural adaptation, water and waste management, clean energy technologies, training of local experts and risk management were frequently reported.

21. An emerging need of developing countries is the **translation of their NDCs into concrete, sector-specific plans of action**. Workshops and similar activities on this topic have been supported by Annex II and other Parties. More generally, some countries expressed their need for a systematic identification of their capacity-building needs and more financial support opportunities to address them.

22. Two types of support were identified to increase **access to climate finance**, which is an area that is not listed in the capacity-building framework. The first type is for projects that aim to improve developing countries' capacity to access existing climate funds, which may involve technical assistance and/or support for relevant reporting activities. The second type is for projects that aim to secure additional climate finance sources, usually by attempting to increase investments from the private sector or by helping to direct local investments into small and medium enterprises.

23. The inclusion of **gender perspectives, human rights considerations and indigenous peoples' knowledge** is limited in most projects. A small number of countries are more heavily engaged in these issues than the majority is. Additional capacity-building, including more research, is needed to increase knowledge about the linkages between gender and climate change and to mainstream the inclusion of gender perspectives in climate change policy and action. A few projects supported by Annex II Parties addressed this issue.

24. In the context of the **Kyoto Protocol**, the Executive Board of the clean development mechanism (CDM) has continued to provide support for designated national authorities (DNAs), including training events in several developing countries. Regional collaboration centres (RCCs) have provided direct technical support and organized various capacity-building events at the regional and subregional level.

25. The Nairobi Framework Partnership[11] (NFP) developed a medium-term strategy based on the barriers and opportunities for **NDC implementation** to improve transparency by providing technical assistance on regional MRV systems and support in order to integrate MRV systems into national carbon markets. Furthermore, NFP carbon forums, which function as a regional platform for discussion and the exchange of experience and information, will henceforth be organized jointly with the NDC Partnership[12] under the umbrella of Climate Week events.

III. Overview of information reported on the implementation of the capacity-building framework

A. Issues related to reporting on capacity-building activities

1. Reporting issues indicated by non-Annex I Parties

26. The usefulness of the data compiled for preparing NCs and BURs, measured against the time and effort that go into preparing the reports and their usage beyond inclusion in the reports, may need to be assessed. For some developing countries, such as Ecuador, the process of preparing the NCs is regarded as a good capacity-building opportunity, whereby various stakeholder groups come together through active dialogue and consultation to contribute to the report. Moreover, countries such as Chile and Saint Lucia actively use the NCs and BURs as their reporting and feedback tool and track their own performance by comparing their recent reports with previous ones. However, other countries see preparing the NCs and BURs only as a requirement under the Convention that needs to be fulfilled, and they scarcely use the information gathered for the NCs and BURs afterwards. Some

[11] For more information, see https://nfpartnership.org/partners/.

[12] For more information, see https://ndcpartnership.org/.

non-Annex I Parties foresee challenges in meeting the additional reporting responsibilities under the Paris Agreement, given their limited administrative and technical capacity.

2. Reporting issues indicated by Annex II Parties and other Parties

27. Many Annex II Parties and other Parties that provided support for capacity-building reported that capacity-building is an integral component built into climate projects that makes separately tracking capacity-building inherently difficult. The cross-cutting and integrated nature of capacity-building also makes it challenging to delineate the financial flows attached solely to the capacity-building component of the projects. In this context, the need for an internationally agreed approach to tracking capacity-building quantitatively and/or qualitatively in official development assistance in general and in climate projects in particular was mentioned in few reports. Further, the need for redesigning or better aligning the national reporting guidelines for capacity-building activities and support provided, given the cross-cutting nature of capacity-building was noted in some BRs.

28. Some developed country Parties left table 9, titled "Provision of capacity-building support", of their BR blank for various reasons, including those specified in paragraph 27 above. Even for those Parties that did fill out table 9, reporting on the capacity-building support provided varies considerably by country. Some countries included only a few representative projects that could be categorized as capacity-building projects, whereas others included all projects that had a capacity-building component. In addition, some countries appeared to use a broader definition of capacity-building than others. Thus, reporting on the capacity-building support provided is not consistent across countries.

B. Capacity-building action undertaken and further capacity-building gaps and needs indicated by developing country Parties within the scope of the capacity-building framework

29. In many developing countries, a dedicated agency that handles climate change related issues and reporting requirements under the Convention has been set up, and new policy frameworks that enable the implementation of low-emission and climate-resilient development have been established. For instance, Mongolia set up a new ministry for green growth since declaring green growth as its national priority. Kyrgyzstan recently established a national commission to take on the reporting tasks and responsibilities under the Convention and to prevent an overlap of work on climate change related issues among its ministries.

30. Some countries have a national climate change policy or strategy in place, and others have incorporated climate change mitigation and adaptation into their development plans. For instance, Colombia has a national plan in place for both adaptation and mitigation, and capacity-building has been built into the Colombian Low Carbon Development Strategy and the national adaptation strategies. Serbia has acknowledged the need for a NAP, but does not have one in place yet. South Sudan does not yet have a national climate change policy or strategy in place, although adaptation is integrated into its development plans. Togo has formulated a NAP, and a technical committee has been set up to coordinate the process to implement it. Kenya recently submitted its NAP, which outlines capacity-building tasks at all levels of society and all sectors, including the engagement of universities and research institutes for assessing local risks and adaptation options. Zimbabwe has several policies in place that support climate change mitigation and adaptation, including the sustainable management of resources such as agricultural land and water (see box 1 below). It should be noted that the process of preparing NCs and developing national climate change policies in developing countries, owing to its inclusive and participatory nature, is being supported by various institutions, including the operating entities of the Financial Mechanism, notably the Global Environment Facility.

Box 1

Integrating climate change issues into policy: recent developments in Zimbabwe

Zimbabwe is in the process of integrating climate change action into a wide range of policy areas. At the time of preparing its third national communication, Zimbabwe was also finalizing a national climate policy. The policy aims to provide a unified and coordinated response to climate change issues; moreover, it will attempt to mainstream climate change issues and reflect them in various sectoral policies. A separate national water policy was established in 2013. Water is a priority adaptation area for Zimbabwe because a sizeable portion of the population lives in rural and farming communities that largely depend on rain-fed agriculture – their livelihoods are heavily affected by rainfall variability and weather extremes. Furthermore, the gender policy of 2013 incorporates climate issues, noting that women are especially vulnerable to climate change as they form the majority of the population in rural and farming communities.

The expected high impact of climate change on agricultural communities is reflected in the fact that 50 per cent of the budget of the National Climate Response Strategy is reserved for water- and agriculture-related measures. The national strategy, among others, aims to create regulatory frameworks to promote resource efficiency, clean production, climate resilience, implementation of mitigation, research and development of mitigation technologies, and monitoring of the implementation of environmental management systems. Funding for this 10-year strategy is expected to come from a wide range of sources, including the national government, the Green Climate Fund, bilateral support, the clean development mechanism and private sector investment. However, financial resources are still lacking, which means that some of the actions outlined in the national water policy, for example, cannot be fully undertaken.

Source: Third national communication of Zimbabwe. Available at http://unfccc.int/national_reports/non-annex_i_natcom/items/10124.php.

31. Despite the notable progress in the institutional set-up of agencies and national climate change plans and programmes, many reports indicate that more needs to be done to better link national climate change agencies with other ministries and to strengthen the coordination of agencies at all government levels. It is commonly reported that many newly established agencies and government structures need to secure personnel, permanent administrative capacity and continuous funding so these institutions can build institutional memory and retain capacity. With regard to national climate change plans and programmes, developing countries seek capacity-building support for implementing those plans and programmes at the sectoral level. It is specifically mentioned that they require additional expertise on how best to solicit the cooperation of industry, key sectors and the public, possibly through education, training and the provision of appropriate incentives.

32. While climate change appears to have gained more potency in governments as a priority area, this potency has not yet led to a systematic integration of climate change into national planning and budgeting in some developing countries, such as Togo. Some countries, such as China and Jordan, are grappling with how to balance economic growth and environmental sustainability. Jordan reported that climate change mitigation or considerations for environmental sustainability in general are not priorities in the allocation of national finances, which increases its dependence on international organizations for support.

33. Training of staff and policymakers and enhancement of the administrative and technical capacity of government institutions responsible for handling climate change related issues were identified as gaps by many countries. Although more infrastructure systems and tools for climate action are currently available in developing countries, a deeper and better defined level of capacity-building of staff and government institutions is needed in all aspects of mitigation- and adaptation-related activities, including greenhouse gas (GHG) emissions accounting, systematic observation, data collection, research, risk and vulnerability assessment, and uncertainty estimation.

34. Challenges were again reported in managing the national GHG inventory and emissions database; institutional capacity and technical expertise are still lacking in

collecting, managing and using data and in effectively coordinating with other sectors and institutions to gather and present national-level data. Developing countries, in general, require further capacity-building in developing national emission factors, especially for the emissions and activities of private sector companies, for setting up emission baselines on a sectoral basis, for calculating emissions and for carbon emissions trading. The Solomon Islands specifically mentioned its need for more training on applying for CDM projects.

35. The need for further capacity-building in the areas of climate risk modelling, vulnerability assessment and early warning systems was frequently mentioned in the reports, including by small island developing States, such as Mauritius and Saint Lucia. In Colombia, a national inventory of vulnerability by region was carried out, but more needs to be done to make better use of the inventory, including enhancing interregional cooperation. In Kenya, vulnerability and risk assessment is yet to be undertaken and incorporated into adaptation plans for the agriculture, water, livestock and fisheries sectors. Risk maps need to be developed in Chile, and the Party mentioned the need for targeted training on adaptation measures that are linked to risk analysis.

36. Educating and training local governments and their staff was identified as a persistent and increasing need, based on a growing understanding that it is not sufficient to train only national governments and staff on climate change issues. The importance of engaging local governments and staff, especially in adaptation-related activities for communities that are particularly vulnerable to climate risks, was reported. Building the capacity of communities is also seen as increasingly important for sustainable development, resilience to climate change and adaptation.

37. Similar to the finding of the 2017 synthesis report on the implementation of the framework for capacity-building in developing countries,[13] many countries reported notable progress in educating and raising awareness of the general public on climate change issues. Climate change has been or is expected to be integrated into school curricula in an increasing number of developing countries.

38. Nevertheless, access to information remains an issue in some developing countries for local people who may not have a computer and Internet access, as much of the information is digitized and provided in English and other major languages only. Even at schools where climate change has been integrated into the curriculum, developing and securing education materials remains a challenge, as is the case for Uzbekistan (see box 2 below).

Box 2

Challenges in implementing climate change education in Uzbekistan

In recent decades, the education system of Uzbekistan has been undergoing radical reforms, including the adoption of mandatory primary and secondary education. In July 2015, the Cabinet of Ministers of Uzbekistan approved the "Program of Actions for Staged Introduction of Principles of Education for Sustainable Development in Educational System of the Republic of Uzbekistan for 2015–2017", which aimed to incorporate sustainable development issues in educational curricula at all levels. Furthermore, the United Nations Economic Commission for Europe's Strategy for Education for Sustainable Development was implemented making use of the knowledge of non-governmental organizations with experience implementing education for sustainable development strategies. Further, a centre on sustainable education was established.

Despite the progress made, Uzbekistan has noted its issues in training teachers on climate change and the lack of training and education materials, especially in the Uzbek language. Moreover, a considerable number of materials are available only digitally, which decreases accessibility for some population groups. A dedicated tool for climate change adaptation and mitigation for vulnerable groups, especially small-scale farmers, needs to be developed. Further, additional educational modules on climate change issues need to be developed for both schoolchildren and students at higher level academic institutions.

Source: Third national communication of Uzbekistan. Available at http://unfccc.int/national_reports/non-

[13] FCCC/SBI/2017/3.

annex_i_natcom/items/10124.php

39. Forming and using regional and international networks for information sharing and cooperation can help better tackle climate change related issues that are often transboundary, including the adaptation and management of water systems and marine areas, climate resilience, and integrated risk assessment. Networks and websites for knowledge exchange and information sharing have been established in some but not all developing countries. In tandem with the need for increased awareness and involvement of the public and all sectors, improved access to information through setting up or strengthening networks and websites is being pursued. For instance, the Solomon Islands reported that it aspires to enhance its existing networks for knowledge exchange by including local and traditional knowledge and the experience of and lessons learned from previous climate change projects.

C. Capacity-building support provided by Annex II Parties and other Parties to address the gaps and needs identified within the scope of the capacity-building framework

40. Most Annex II Parties and other Parties acknowledged that capacity-building is an essential element for climate change mitigation and adaptation projects. Capacity-building helps ensure the successful and effective implementation of climate change measures and the sustainability of any project or programme. As noted in paragraph 27 above, several Annex II Parties indicated that the cross-cutting and integrated nature of capacity-building makes separate tracking of capacity-building support challenging.

41. Notwithstanding the challenges indicated in reporting on capacity-building support provided, the table below provides a quantitative summary of all capacity-building projects that Annex II and other Parties supported in this reporting cycle. The information comes directly from table 9 of the countries' respective BRs, and the table uses target area classifications also taken from table 9 of the BRs. Projects marked as covering "multiple" areas are the ones listed by the countries as supporting "multiple target areas" or marked as "cross-cutting" or "multiple". If table 9 of a country's BR was left blank, projects included in its NCs and BRs that had an explicit capacity-building component were included in the table; this was the case for Hungary, Lithuania, Malta and Switzerland. Parties included in Annex I to the Convention that are not included in Annex II are not obliged to provide capacity-building support, but such support was still reported by some countries and is shown in the table.

42. A caveat to the table is that reporting varies considerably by country. As noted in paragraph 28 above, some countries provided a few representative projects in table 9 of their BRs whereas others listed all projects that include a capacity-building component. In addition, the classification of projects differed considerably by country. For example, Slovakia separately listed individual scholarships, which resulted in a relatively high number of capacity-building projects reported. For most countries, technology transfer was an integrated part of projects, which meant the projects were classified as supporting "multiple" areas, but Italy is a notable exception: it had a very large number of projects listed under "technology transfer".

Overview of capacity-building support provided by Annex II Parties and other Parties

Country	*Annex II Party?*	*No. capacity-building projects supporting mitigation*	*No. capacity-building projects supporting adaptation*	*No. capacity-building projects supporting multiple areas*	*No. capacity-building projects supporting technology transfer*	*Total no. capacity-building projects*
Australia	Yes	10	0	1	0	11
Austria	Yes	2	1	1	0	4
Belgium	Yes	6	22	12	0	40
Bulgaria	No	–	–	–	–	0

Canada	Yes	6	5	4	0	15
Czechia	No	–	–	–	–	0
Denmark	Yes	4	3	2	0	9
Estonia	No	–	–	–	–	0
European Union	Yes	5	2	4	0	11
Finland	Yes	1	0	5	0	6
France	Yes	2	3	4	0	9
Germany	Yes	6	7	3	0	16
Greece	Yes	0	1	1	0	2
Hungary	No	–	–	–	1	1
Iceland	Yes	2	2	2	–	6
Italy	Yes	1	2	16	17	36
Japan	Yes	5	9	6	0	20
Kazakhstan	No	0	1	1	1	3
Latvia	No	1	0	3	0	4
Liechtenstein	No	–	–	–	–	0
Lithuania	No	1	2	2	–	5
Malta	No	0	2	0	0	2
Netherlands	Yes	2	14	1	0	17
New Zealand	Yes	12	18	11	0	41
Norway	Yes	8	4	7	0	19
Poland	No	0	3	0	0	3
Portugal	Yes	8	5	0	0	13
Romania	No	–	–	–	–	0
Russian Federation	No	1	0	1	0	2
Slovakia	No	0	35	0	0	35
Spain	Yes	0	5	30	1	36
Sweden	Yes	3	5	10	0	18
Switzerland	Yes	0	1	3	0	4
United Kingdom	Yes	4	4	3	0	11
Total		**80**	**156**	**132**	**20**	**399**

Sources: Third biennial reports as well as national communications of 2017. Available at http://unfccc.int/national_reports/biennial_reports_and_iar/biennial_reports_data_interface/items/10132.php and http://unfccc.int/national_reports/non-annex_i_natcom/items/10124.php, respectively.

43. The types of capacity-building support provided by Annex II and other Parties depended primarily on the specific needs and priorities of developing countries and the strengths and expertise of the countries providing the support. Finland supported the enhancement of hydrometeorological services in non-Annex I Parties by strengthening the capacity of national hydrometeorological institutions in various developing countries. Greece intensified its capacity-building support for water and natural resources management, wastewater and solid waste management, and adaptation in the least developed countries as part of its development assistance efforts. New Zealand provided support for capacity-building in agriculture, renewable energy and resilient infrastructure through various bilateral and multilateral mechanisms, including the New Zealand Aid Programme and the Global Research Alliance on Agricultural Greenhouse Gases.

44. Some projects supported by developed country Parties aimed to build the institutional capacity of developing countries. For instance, the United Kingdom of Great Britain and Northern Ireland assisted developing countries in creating or strengthening domestic institutions to help implement the transparency provisions of the Paris Agreement. It also provided technical tools that enable the estimation of GHG emissions and removals and the tracking of progress towards the NDC targets in developing countries. Sweden supported a forest management programme in Mozambique that is designed to improve.

among other things, its institutional capacity and relevant legal and policy frameworks for sustainable forest management practices.

45. A total of 80 projects were reported as distinctly supporting mitigation, as shown in the table above, although many more projects supporting mitigation were listed under "multiple areas". In support of mitigation, capacity-building was primarily offered for activities aimed at strengthening measures to reduce emissions from land use, deforestation and forest degradation, developing countries' readiness for a domestic carbon emission market and low-carbon development. For instance, Germany supported a forest programme aimed at the reduction of emissions from deforestation and forest degradation (REDD-plus[14]) in Indonesia that includes various capacity-building measures. The programme assists the Government of Indonesia in designing and implementing legal, policy and institutional reforms for the conservation and sustainable management of forests at the local, provincial and national level; it also provides education and training opportunities for decision makers from the public and the private sector so they can learn how REDD-plus activities can be implemented on the ground. Through a World Bank partnership programme, Australia helped build the capacity of developing countries to develop their domestic carbon market instruments to scale up emission reduction efforts and support low-carbon development. The United Nations Development Programme's (UNDP) Low Emission Capacity Building Programme is another example of projects supporting mitigation action at the country level with distinct features for relevant capacity-building and technology transfer (see box 3 below).

Box 3

United Nations Development Programme's Low Emission Capacity Building Programme

The Low Emission Capacity Building Programme of the United Nations Development Programme is supported by Australia, Germany and the European Union. Its focus is on realizing climate change mitigation and sustainable development opportunities, within the context of national priorities and planning processes, for 25 countries around the world. The programme provides tools and training for identifying and designing relevant projects, as well as innovative policy and financing options. The project uses a menu approach, which means that each participating country determines, develops and executes its own project with a clear focus on one of the national priority areas. Country-level insights are shared within the project to stimulate discussion and strengthen technical capacities for the implementation of climate action. The project includes both a Global Support Team and in-country offices that facilitate consultations and workshops. The aim is to engage both public and private sector stakeholders.

Source: Seventh national communication and third biennial report of the European Union. Available at http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/10138.php.

46. Efforts were made to increase access to renewable energy and to promote energy efficiency in developing countries as a driver for low-carbon and climate-resilient development. For instance, the Promotion of Renewable Energy and Energy Efficiency Programme, supported by Germany, works with the Ugandan Ministry of Energy and Mineral Development to build the ministry's capacity for the improved policies, budget planning, monitoring and evaluation necessary for a more sustainable use of energy and, ultimately, mitigation. The programme also includes capacity-building measures for the private sector that aim to disseminate renewable and energy-efficient products and services more widely and in the long term. Japan supported a project in Pakistan that aims to phase out the use of inefficient electronic appliances and to make energy efficiency labelling mandatory.

[14] In decision 1/CP.16, paragraph 70, the COP encouraged developing country Parties to contribute to mitigation actions in the forest sector by undertaking the following activities: reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks.

47. On the climate-friendly and renewable energy front, study tours and partnership opportunities were offered to build the capacity of the biogas and geothermal energy sectors. For instance, the Netherlands helped build the capacity of the biogas sectors in Burkina Faso, Ethiopia, Kenya, Tanzania and Uganda so the countries could use domestic biogas as an energy source. The Netherlands also offered various training opportunities for the geothermal sector of Indonesia and provided support for the Group of 20 and Asia-Pacific Economic Cooperation economies to reform their inefficient fossil fuel subsidies. Iceland, too, provided research and training opportunities for practitioners from developing countries in the field of geothermal energy, in cooperation with the United Nations University.

48. A total of 156 projects were reported as primarily supporting "adaptation", as shown in the table above, although many more projects supporting adaptation are also listed under "multiple areas". As part of their capacity-building support for adaptation, developed country Parties assisted developing countries in the integration of climate resiliency in existing and new infrastructure and in a green transformation of their agricultural and forestry practices, among other aspects. The sustainable development and management of water resources, especially for agricultural irrigation, and waste management were some of the notable areas of support for adaptation. Efforts were made to reduce the vulnerability of the rural population to climate risks, including through insurance coverage in developing countries. For instance, Deutsche Gesellschaft für Internationale Zusammenarbeit in Germany worked closely with insurance companies and clients in India to improve the insurance coverage of rural households and farms so that small farmers can better cope with financial losses in the cases of crop failure or extreme weather events. Italy signed a memorandum of understanding with the environment ministries of multiple developing countries, including Argentina, Belize and Georgia, to support mechanisms for climate change vulnerability and risk assessment and to implement, among other things, adaptation measures.

49. A total of 20 projects were reported as supporting "technology transfer", as shown in the table above, although many projects marked as supporting "multiple areas" include a technology transfer component. In fact, the development and transfer of technology was embedded in many of the climate projects supported by Annex II and other Parties, including those mentioned in paragraphs 44–48 above, and relevant capacity-building support was provided. For instance, Belgium extended its support for an agroforestry food security programme in Malawi that aims to promote climate-smart and resilient agroforestry technologies and practices. The programme was also dedicated to strengthening the capacity of local and national institutions and non-governmental organizations in scaling up the climate-smart agroforestry practices and helping policymakers formulate appropriate policy instruments for mainstreaming such practices. Germany supported a South–South cooperation project that entails working with 18 developing countries to improve their GHG emission reporting following the implementation of REDD-plus activities. The project helped disseminate a software tool for forest monitoring developed by the Government of Brazil that uses remote sensing technology and geoinformation systems to enhance the target countries' monitoring systems, enabling improved monitoring of REDD-plus activities and their resulting GHG emission reductions.

IV. Overview of emerging or new areas for capacity-building

50. This chapter contains information about a few capacity-building areas mentioned in the reports submitted by developing as well as developed country Parties in this reporting cycle that are emerging or new areas for capacity-building. These areas, although linked to the overarching themes considered in the capacity-building framework, are not included in the list of 15 priority areas and needs agreed in 2001. The evolving nature of climate science and policy has led to the emergence of new capacity-building needs. Some of these new areas for capacity-building have been identified before, notably in the technical paper

prepared by the secretariat on the third comprehensive review of the implementation of the framework for capacity-building in developing countries;[15] these previously identified emerging areas include REDD-plus, readiness for and access to climate finance, nationally appropriate mitigation actions (NAMAs), NDCs and transparency.[16]

A. Emerging or new areas for capacity-building and associated gaps and needs indicated by developing country Parties

51. The MRV of mitigation actions was frequently cited as an emerging area for capacity-building that needs to be strengthened further, similar to the finding of the 2017 synthesis report.[17] Additional support is needed to enable developing countries to set up functional meteorological institutes and to collect, generate and interpret data in accordance with the Intergovernmental Panel on Climate Change guidelines and the Paris Agreement. Training for the effective use of MRV software and tools and for more systematic observation is required to enhance the MRV process. Tunisia mentioned the need for capacity-building for developing NAMAs and tracking progress on their implementation as well as for relevant MRV methodologies.

52. One of the emerging areas for capacity-building identified is the ability to translate the goals of the NDCs into concrete actions for key sectors. The need to provide relevant education and training opportunities to the sectors for successful implementation of NDCs was also mentioned.

53. Uruguay noted the need for future Capacity-building Initiative for Transparency projects to provide a methodological approach to identifying and assessing a country's needs for support in the areas of finance, technology and capacity-building to implement its mitigation projects successfully. Related to this is the need, mentioned by Colombia and Tunisia, for improved access to information about and tracking of climate finance opportunities for developing countries.

B. Support provided by Annex II Parties and other Parties to address the emerging or new areas for capacity-building

54. Support was provided to help equip developing countries with the capacity for MRV activities. For instance, the European Union, through its ClimaSouth project, provided technical assistance for mitigation in the Mediterranean, particularly for the MRV of GHG emissions and the formulation of low-emission development strategies. Another project supported by the European Union offered selected local governments a comprehensive methodological framework, called the GreenClimateCities methodology, to integrate low-carbon strategies into all sectors of urban planning and development. The European Union also disseminated a GHG emissions quantification and monitoring software called the Harmonized Emissions Analysis Tool Plus (HEAT+) and made available a pool of experts who could provide training on using the software. HEAT+ is designed to support the forecasting, planning and verification of mitigation actions undertaken. Germany supported a project that aims to establish a climate competence centre in Morocco to enable its implementation of the national climate strategy by strengthening the capacity of Morocco's national observatory and 13 regional observatories. The project also aims to develop a reliable climate database and an MRV system.

55. Support was provided to help developing countries develop and further elaborate their intended nationally determined contributions (INDCs) with the aim of encouraging more countries to be active in pursuing the goals of the Paris Agreement. For instance, Germany hosted a global workshop on INDCs in Berlin in 2017 that was attended by more than 50 countries. In 2015, Spain organized a regional workshop, targeting Latin American

[15] FCCC/TP/2016/1.
[16] As footnote 15 above.
[17] FCCC/SBI/2017/3.

and Caribbean countries, on tools and methodologies for the design of INDCs. The NDC Partnership is a new international partnership launched with the objective of helping turn the NDCs of countries into specific strategies and measures, and support was provided for activities of the NDC Partnership by countries like Germany and the United Kingdom.

56. Some capacity-building projects supported by Annex II Parties were aimed at facilitating developing countries' access to climate finance. For instance, Australia supported a project aimed at enhancing the capacity of South Africa to monitor and measure emissions from land use so that it can meet the international reporting requirements and gain accreditation for climate finance. New Zealand provided technical assistance to developing countries in the Asia-Pacific region to help them gain a better understanding of the funding requirements of the Green Climate Fund and to help eligible governments obtain funding for their selected climate projects. Canada supported a project of the International Development Research Centre that brings together stakeholders from the policy and scientific community and the private sector to discuss and analyse current challenges and opportunities in adaptation finance. The project, launched in April 2016, aims to develop a typology and criteria for adaptation projects that can help attract and secure more investment from the private sector and to investigate the financial and business risks associated with adaptation projects. It also aims to assess how such risks can be mitigated and how financial institutions and the public sector can work together to enable larger financial flows into adaptation.

57. In addition to providing support to facilitate access to existing climate finance, efforts are being made to enhance capacities for securing additional sources of funding. For instance, the United Kingdom provided technical assistance through the Global Climate Partnership Fund. The Fund envisions setting up an investment vehicle that invests through local banks in developing countries to make finance available for small and medium enterprises for energy efficiency and renewable energy projects. Belgium's Green Growth Strategy Facility programme is another example of a climate finance facility (see box 4 below).

Box 4

Green Growth Strategy Facility: support provided by Belgium

The objective of this project is to enable the implementation of the Viet Nam National Green Growth Strategy by setting up a new climate finance facility. For the duration of the project, the facility is to be tested through pilot green growth projects. The project includes two capacity-building activities. At the national level, the project supports the Ministry of Planning and Investment in developing the required capacity to manage the climate finance facility over the long term. At provincial level, all the selected pilot projects include capacity reinforcement. In Ha Tinh province, farmers are being trained to grow organic mushrooms using agricultural residues and climate-friendly techniques. Water-efficient irrigation techniques leading to a reduction of fertilizer-related greenhouse gas emissions will be taught and implemented in the provinces of Binh Thuan and Ninh Thuan. The pilot projects also include technology transfer activities necessary for water-efficient irrigation systems and solar photovoltaic powered light emitting diode lighting in Binh Thuan.

Source: Seventh national communication and third biennial report of Belgium. Available at http://unfccc.int/files/national_reports/annex_i_natcom_/application/pdf/7319685_belgium-nc7-br3-1-nc7_en_lr.pdf.

58. Support was provided to strengthen the governance of climate finance in developing countries. A UNDP programme supported by Sweden helps to integrate climate change considerations in the local and national budgeting and planning processes in some developing countries in Asia. The programme also focuses on climate action that promotes gender equality, human rights and poverty reduction in an integrated manner. The United Kingdom provided support for integrating climate change into development planning, budgeting and delivery in Southern Asian countries with the aim of 'climate proofing' growth and development.

59. Some projects specifically targeted enhancing the capacity of female delegates from developing countries and generating knowledge about linkages between gender and climate

change. For instance, Iceland, in partnership with the United Nations University Gender Equality Studies and Training Programme, supported research on gender and climate change in the context of rural Uganda and helped prepare the Ugandan delegation for participation in the COP. Finland supported the projects of various partner institutions that were aimed at mainstreaming gender perspectives in climate policy and action at the local, national and international level (see box 5 below).

Box 5

Mainstreaming gender in global climate policy: support provided by Finland

From 2008 to 2016, Finland supported a project implemented by the Global Gender and Climate Alliance aimed at strengthening the role of women and mainstreaming gender perspectives in global climate policy. The project, through its four phases, advocated the establishment and implementation of gender-responsive actions on climate change through promoting the participation of women in UNFCCC negotiations, providing technical support to Parties and stakeholders, and helping incorporate criteria for gender equality and women's empowerment in climate finance mechanisms. Specifically, the Women Delegates Fund, administered by the Women's Environment and Development Organization, supported the travel of women delegates to participate in UNFCCC meetings and helped enhance their leadership and negotiation skills. Another partner institution of Finland, the International Union for Conservation of Nature, facilitated the development of national climate change and gender action plans, bringing the total number to 21. Moreover, the United Nations Development Programme supported mainstreaming gender at the national level through the development of guidelines and training programmes.

Source: Third biennial report of Finland. Available at http://unfccc.int/national_reports/biennial_reports_and_iar/biennial_reports_data_interface/items/10132.php

V. Capacity-building activities under the Kyoto Protocol

60. The CDM Executive Board continued to support DNAs, including through training events in Benin, Colombia, Honduras, Madagascar, Mongolia, Pakistan, Panama, the Philippines and Thailand. For instance, a global Designated National Authorities Forum held in November 2016 enabled an exchange of information and sharing of experience. RCCs provided direct technical support and organized various capacity-building events at the regional and subregional level. During the reporting period, the sustainable development tool was further promoted and made more user-friendly; the tool is an online interface with which project participants can voluntarily report on the sustainable development co-benefits of their CDM projects.

61. A number of NFP meetings were held, which convened DNAs, NFPs, potential investors and experts, including those from regional carbon forums. The future of the carbon forum was discussed in the 2017 annual report of the NFP; the regional carbon forums that were held in Africa, the Asia-Pacific, and Latin America and the Caribbean will henceforth be organized under the umbrella of Climate Week. Climate Week events will be jointly hosted by the NFP and the NDC Partnership and will potentially discuss the following topics: NDC implementation and continuity of CDM mitigation projects in a transparent manner; support for the implementation of carbon markets, possibly based on the CDM; dissemination of green technologies using the CDM to finance climate action; and development of climate policies.

62. The NFP developed a medium-term strategy based on barriers and opportunities for NDC implementation. The thematic areas of this strategy are carbon market frameworks, transparency and MRV, and financing mitigation action, each of which is taken up by institutions such as the World Bank, UNDP and the United Nations Environment Programme. The NFP's work on transparency and MRV will aim to provide the technical assistance needed for regional MRV systems and for coordinating and integrating national carbon markets and MRV systems, including the use of CDM tools. The work area of financing mitigation action aims to improve access to other sources of funding, potentially including impact investment, crowdfunding and remittances.